WHAT IS CLAIMED IS:

1   1.   A metadata validation system for validating an object model, the
2   system comprising:
3   a client device configured to receive user input and provide a user interface to
4   a user;
5   a database for storing objects and metadata of the object model;
6   a configuration management module for creating a deployable collection of
7   objects; and
8   a validation engine for validating metadata in the database, wherein said
9   validation engine is configured to perform completeness validation on a validation subject in
10   response to a user entered command to perform validation on the subject, to automatically
11   perform correctness validation on a validation subject when the subject is created or updated,
12   and to automatically perform completeness and correctness validation on a validation subject
13   when requested by the configuration management module.

1   2.   The system of claim 1, wherein a validation subject is an instance of
2   one of an attribute, an association, an object and a collection of objects.

1   3.   The system of claim 1, wherein a validation subject is a meta metadata
2   object selected from the group consisting of a MetaAttribute, a MetaAssociation, a
3   MetaAssociationEnd, a MetaClass and a MetaCollection.

1   4.   The system of claim 1, wherein completeness validation includes the
2   application of a completeness validation rule to the validation subject.

1   5.   The system of claim 1, wherein correctness validation includes the
2   application of a correctness validation rule to the validation subject.

1   6.   The system of claim 1, wherein the validation subject is a deployable
2   collection of objects from the database.

1   7.   The system of claim 1, wherein the validation subject is an aggregated
2   collection of objects from the database.

1   8.   A computer-implemented method of validating metadata in an object
2   model, the method comprising:

3   creating an instance of a meta metadata object in response to user input;

4   automatically applying one or more correctness type validation rules to the

5 object instance;

6   if a user selects validation of the object instance, applying one or more

7 completeness validation rules to the object instance; and

8   automatically applying both the one or more correctness validation rules and

9 the one or more completeness validation rules to the object instance prior to deployment of

10 the object instance.

1   9.   The method of claim 8, wherein the meta metadata object is one of an

2 attribute, an association, an object and a collection of objects.

1   10.   The method of claim 8, wherein the meta metadata object is an

2 association and wherein the object instance to which a validation rule is applied includes the

3 two objects associated by the association.

1   11.   The method of claim 8, further including automatically applying the

2 one or more correctness type validation rules to the instance if the instance is automatically

3 updated or manually updated.

1   12.   The method of claim 11, wherein the meta metadata object is one of an

2 attribute and an object.

1   13.   The method of claim 8, wherein the meta metadata object is one of an

2 aggregated collection and a deployable collection.

1   14.   A system for validating metadata in an object model, the system

2 comprising:

3   a database for storing objects and meta metadata objects of the object model;

4   means for creating an instance of a meta metadata object in response to user

5 input; and

6   a validation means for automatically applying one or more correctness type

7 validation rules to the object instance when the instance is created, for applying one or more

8 completeness validation rules to the object instance if a user manually selects validation of

9 the object instance, and for automatically applying both the one or more correctness

10   validation rules and the one or more completeness validation rules to the object instance prior

11   to deployment of the object instance.

Attorney Docket No.: 021756-003100US
Client Reference No.: OID-2003-109-01